V. Ordering and Provisioning Test Section

A. Overview

The purpose of this section is to define the specific order and provisioning tests to be undertaken in evaluating the systems and related operational elements associated with BellSouth's establishment and maintenance of business with CLECs.

The purpose of this section is to define the specific ordering and provisioning tests needed to prove nondiscriminatory access to BellSouth's OSS in order to comply with the Georgia Order and the Act.

B. Scope

The ordering and provisioning test scope is defined by the following test dimensions: interface, test objective, product category, and test technique. The table identifies the test target, the interface under test, the primary test objective(s), the BST product offering, and the test technique(s) to be employed.

The test cycles are based on those combinations of test dimensions required within the scope of the Georgia Order.

	: Test Dimensions			
Test Cycle	Interface	Primary Test Objective		• Test Technique
O&P-1: EDI Functional Test	EDI	Functionality	UNE	Transaction Processing
O&P-2: TAG Functional Test	TAG	Functionality	UNE	Transaction Processing
O&P-3: EDI/TAG Normal Volume Performance Test	EDI TAG	Volume & Scalability Performance	Resale UNE	Transaction Processing
O&P-4: EDI/TAG Peak Volume Performance Test	EDI TAG	Volume & Scalability Performance	Resale UNE	Transaction Processing

O&P-5: Provisioning Verification Test	TAG	Performance	UNE	Transaction Processing Inspection
O&P-6: Ordering Processing Systems <u>Capacity</u> <u>Management Scalability</u> Evaluation	EDI TAG	Volume & Scalability Processing Capacity	Resale UNE	Inspection Interview
O&P-7: O&P Performance Results Comparison	EDI TAG	Performance	Resale UNE	Performance Comparison
O&P-8: EDI Documentation Evaluation	EDI	Documentation	Resale UNE	Document Review Interview
O&P-9: TAG Documentation Evaluation	TAG	Documentation	Resale UNE	Document Review Observation
O&P-10: EDI/TAG Production Volume Performance Test	EDI TAG	Volume & ScalabilityPerformance	Resale UNE	Transaction Processing

Figure V-I: Ordering and Provisioning Test Cycles

C. Test Cycles

1.0 O&P-1: EDI Functional Test

1.1 Description

The EDI Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for UNEs against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN).

EDI ordering and provisioning functionality will be reviewed along with the documentation addressing its use. This test cycle will address all electronically ordered UNE requisition type and activity type combinations for business and residence customers. Other functional elements of the UNE ordering and provisioning process to be tested include flow-through and non-flow-through orders, full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch

provisioning, expedites, <u>service order status inquiries</u>, and jeopardy notices delivered through the EDI <u>interface</u>.

Orders will be submitted as both stand alone transactions and as integrated pre-order /order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions.

Additionally in preparation for the volume test, a limited number of resale scenarios will be tested to evaluate the functional elements of the ordering and provisioning process for resale orders as delivered to CLECs by the EDI interface. This test cycle will be executed by submitting local service requests (LSRs) for resale orders against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN).

The EDI ordering and provisioning test will require BellSouth to establish a test bed of customer accounts against which to place the requisite service requests. Additionally, BellSouth must establish the process or triggers by which to drop service requests out of the process following the successful return of an FOC and prior to entering the provisioning process. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations.

FinallyAdditionally, the downstream CRIS/CABS Invoicing Functional Test (BLG-1) requires that those transactions allowed to complete through provisioning utilize -three operating company numbers (OCNs). The test scenarios to be used in the EDI Functional Test are described in Appendix B-3: UNE Ordering Scenarios. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations.

Scenarios for ordering Local Number Portability (LNP) and for CLEC-to-CLEC migrations will be processed by the Test Manager using customer data and other requisite order data from CLECs currently doing business with BellSouth Georgia.

EDI ordering and provisioning functionality will be reviewed along with the documentation addressing its use. Documentation issues encountered during the creation of order transactions will be analyzed and reported in O&P-8: EDI Documentation review.

The test scenarios to be used in the EDI Functional Test are described in Appendix B 3: UNE Ordering Scenarios.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and <u>KPMGHP</u>'s performance measurement systems are prepared to track test transaction performance prior to beginning the <u>Testtest</u>. Test cycle performance data will also be

collected through test management tools and delivered to the O&P Performance Results Comparison Test (O&P-7), and KPMG as inputs to their respective test execution functions.

1.2 Objective

The objective of the EDI Functional Test is to accurately prove evaluate the existence of EDI functionality for electronically ordered UNEs in accordance with EDI documentation.

- Global Entrance Criteria must be satisfied.
- EDI documentation and training materials must be obtained.
- Test transaction tracking strategy must be identified.
- Five OCNs must be acquired and deployed (-three for provisioning).
- Target performance metrics must be identified.
- BellSouth's and <u>KPMG'sHP's</u> performance measurement tracking systems must be prepared to track test transactions.
- PC EDI or EDI LAN to LAN must be configured and installed. Transaction submission tools installed and configured.
- All appropriate SRT activities must be completed.
- BellSouth test-bed customer account data must be loaded.
- CLEC data for LNP orders obtained.
- Expected results files must be completed.
- Integrated test management tools must be installed and configured.
- Test scripts (transaction content) must be completed and loaded.
- Test case execution must be scheduled.
- Test cycle execution checklist must be created.
- Test logs must have been created and results reporting template completed.

- -Account and security access to EDI must be established.
- -EDI connectivity must be established.
- Test execution team must be staffed, scheduled, and trained.
- Test Plan and evaluation criteria must be defined and approved.

The $\underline{\text{test}}$ scope will address the following sub-processes and functions to evaluate EDI functionality.

Test Object	ive: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing
Sub-Process	Function
Submit an Order	Create order transaction(s).
	Send order in LSR formatSubmit integrated LSR.
	Receive acknowledgment.
	Receive FOC/error/reject notification.
	Send expedited order transaction.
Submit an Error	Create error transaction(s).
	Send error in LSR format.
	Receive acknowledgment.
	Receive planned error/reject notification.
	Correct error(s).
	Resend orderResend integrated LSR.
	Receive FOC.
Supplement an Order	Create supplement transaction(s).

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing

Sub-Process	Function .
	Send supplement.
	Receive acknowledgment.
	Receive <u>FOC/</u> error/reject notification.
	Correct error(s).
	Resend supplement.
	Determine status of transaction response.
	Receive FOC.
Cancel an Order	Create cancel transaction.
	Send-cancel.
	Receive acknowledgment.
	Receive FOC.
Pre-order/Order Integration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
	Resend integration order.
	Receive FOC.
Receive Completion Notice (CN)	Receive CN transaction.
Receive Jeopardy Notification	Receive jeopardy notification transaction.

- 182. Generate test results reports.
- 193. Calculate and report performance metrics.

1.6 Exit Criteria

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- Disaggregated performance metrics report must be completed and delivered to O&P Performance Results Comparison Test.
- Expected versus actual results report must be completed.
- Where applicable, Eexceptions report must be completed.
- Exceptions report due to d<u>D</u>ocumentation <u>issue logs</u> must be delivered to Document Review Test.
- Post mortem analysis must be conducted.
- Test cycle results summary report must be completed.
- Results summary and formatted data must be delivered to KPMG.
- Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.

2.0 O&P-2: TAG Functional Test

2.1 Description

The TAG Functional Test will evaluate the functional elements of the ordering and provisioning process for UNEs as delivered to CLECs via the TAG interface. This test cycle will be executed by submitting LSRs for UNEs against BellSouth test-bed accounts and allowing the process to continue through the return of either an FOC or reject/error

notice. A number of these transactions will be permitted to proceed through the physical provisioning process and return an electronic CN.

TAG ordering functionality will be reviewed along with the documentation addressing its use. This test cycle will address all electronically ordered UNE requisition type and activity type combinations for business and residence customers. Other functional elements of the UNE ordering and provisioning process to be tested include flow-through and non-flow-through orders, full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, a expedites, service order status inquiries, and jeopardy notices delivered through the TAG interface.

Orders will be submitted as both stand alone transactions and as integrated pre-order /order transactions. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions.

Additionally, in preparation for the volume test, a limited number of resale scenarios will be tested to evaluate the functional elements of the ordering and provisioning process for resale orders as delivered to CLECs by the TAG interface. This test cycle will be executed by submitting LSRs for resale orders against BellSouth test-bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of an electronic completion notice (CN).

The TAG interface ordering and provisioning test will require BellSouth to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations. Additionally, BellSouth must establish the process or triggers by which to drop service requests out of the process following the successful return of an FOC, and prior to entering the provisioning process. FinallyAdditionally, the downstream CRIS/CABS Invoicing Functional Test (BLG-1) requires that those transactions allowed to complete through provisioning utilize two OCNs. The test scenarios to be used in the TAG Functional Test are described in Appendix B-3: UNE Ordering Scenarios. Customer test accounts will be distributed geographically across multiple Georgia COs and switching/transmission equipment configurations.

Scenarios for ordering Local Number Portability (LNP) and CLEC-to-CLEC migrations will be processed by the Test Manager using customer data and other requisite order data from CLECs currently doing business with BellSouth Georgia.

TAG ordering functionality will be reviewed along with the documentation addressing its use. Documentation issues encountered during the creation of order transactions will be analyzed and report in O&P-9: TAG Documentation Review.

The test scenarios to be used in the TAG Functional Test are described in **Appendix B 3**: UNE Ordering Scenarios.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and HPKPMG's performance measurement systems are prepared to track test transaction performance prior to beginning the Testtest. Test cycle performance data will be also be collected through test management tools and delivered to the O&P Performance Results Comparison Test (O&P-7) and KPMG as inputs to their respective test execution functions.

2.2 Objective

The objective of the TAG Functional Test is to accurately prove evaluate the existence of TAG functionality for electronically ordered UNEs in accordance with TAG documentation.

- Global Entrance Criteria must be satisfied.
- TAG documentation and training materials must be obtained.
- Test transaction tracking strategy must be identified.
- Five OCNs must be acquired and deployed (three for provisioning).
- Target performance metrics must be identified.
- BellSouth's and HP KPMG's performance measurement tracking systems must be prepared to track test transactions.
- All appropriate SRT activities must be completed.
- xst (TAG) Test Client terminal stations must be configured and installed. Transaction submission tools installed and configured.
- BellSouth test-bed customer account data must be loaded.
- CLEC data for LNP orders obtained.
- Expected result files must be completed.

- Integrated test management tools must be installed and configured.
- Test scripts (transaction content) must be completed and loaded.
- Test case execution must be scheduled.
- Test cycle execution checklist must be created.
- Test logs must have been created and results reporting templates completed.
- Account and security access to TAC must be established.
- TAG connectivity must be established.
- Test execution team must be staffed, scheduled, and trained.
- Test Plan and evaluation criteria must be defined and approved.

The <u>test</u> scope will address the following sub-processes and functions to evaluate TAG functionality.

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing		
Sub-Process	Function .	
Submit an Order	Create order transaction(s).	
	Send order in LSR formatSubmit integrated LSR.	
	Receive acknowledgment.	
	Receive FOC/error/reject/notification.	
	Send expedited order transaction.	
Submit an Error	Create error transaction(s).	
	Send error in LSR format.	
	Receive acknowledgment.	

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing

Sub-Process	Function
	Receive planned error/reject notification.
	Correct error(s).
	Resend orderResend integrated LSR.
	Receive FOC.
Supplement an Order	Create supplement transaction(s).
	Send supplement.
	Receive acknowledgment.
	Receive FOC/error/reject notification.
	Correct error(s).
	Resend supplement.
	Receive FOC.
Cancel an Order	Create cancel transaction.
	Send cancel.
	Receive acknowledgment.
Pre-order/Order Integration	Populate integration orders with information returned from designated pre-order response.
	Submit integration orders.
	Receive acknowledgement.
	Receive error/reject notification.
	Correct errors.
	Resend integration order.
	Receive FOC.

Test Objective: Functionality, Performance, Documentation, and Interface Test Technique: Transaction Processing		
Sub-Process	Function :	
Receive Completion Notice	Receive CN transaction.	
	Receive transaction response.	
Receive Jeopardy Notification	Receive jeopardy notification transaction.	
Check Service Order Status	Create service order status request.	
	Send transaction.	
	Receive response.	

Figure V-III: TAG Functional Test Scope

2.5 Test Activities

- 1. Submit TAG test case transactions according to schedule.
- 2. Log transaction identifier(s) and submission date/time stamp.
- 3. Receive transaction responses.
- 4. Log transaction identifier(s) and receipt date/time stamp.
- 5. Format transaction response for comparator evaluation.
- 6. Match transaction response to submitted transaction.
- 7. Verify that transaction response contains expected results.
- 8. Flag any exceptions or mismatched responses and determine next steps in exception resolution process. (If none, go to Step 17.)
- 9. Review exceptions to identify root cause(s).
- 10. Report any Severity 1, 2, and 3 test exceptions.
- 11. Troubleshoot exceptions and determine resolution procedures.
- 12. Resolve exceptions in accordance with exception resolution process.
- 13. Determine if test cycle should continue. (If not, go to Step 18.)
- 14. Take corrective actions.

- 15. Increment transaction version numbers and resubmit transaction.
- 16. Log resubmission transaction identifier(s) and date/time stamp. (Go to Step 3.)
- 171 Review comparator results and identify pending/open transactions.
- 182 Generate test results reports.
- 193 Calculate and report performance metrics.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- —Disaggregated performance metrics report must be completed and delivered to O&P Performance Results Comparison Test.
- Expected versus actual results report must be completed.
- Where applicable, Eexceptions count report must be completed.
- -Exceptions report due to d<u>D</u>ocumentation <u>issue logs</u> must be delivered to <u>Document Review Test.</u>
- Post mortem analysis must be conducted.
- Test cycle summary report must be completed.
- ults summary and formatted data must be delivered to KPMG.
- Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.

3.1 Description

The EDI/TAG Normal Volume Performance Test will evaluate simultaneously the behavior and performance of both the EDI and TAG interfaces under "normal" YE01 projected transaction load conditions. This test cycle will be executed by TTGs in a manner consistent with the forecasted daily usage patterns and transaction mix (including error conditions) for each interface. The TTGs are capable of submitting large volumes of flow-through pre-ordering (TAG only), and resale and UNE service request test cases. Patterns of time within the day and patterns of days within the month will be emulated.

The normal volume forecast will be developed across BellSouth's entire nine-state region (not—Georgia only) as described in Appendix C: Volume Analysis. The test will be executed during two ten-hour periods by modeling the expected normal daily usage pattern (e.g., the off-peak nighttime hour loads will be ignored for the Testtest). The majority of the transactions submitted in support of this test cycle are expected to flow through BellSouth's OSS electronically and return an error or an FOC. However, a representative sample of transactions will be submitted to test BellSouth's processing capacity for electronically ordered service requests and errors that fall out for manual processing. LSR transaction loads will be distributed geographically across multiple Georgia COs. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/TAG Normal Volume Performance Test are described in Appendix B-2: Resale Ordering Scenarios and Appendix B-3: UNE Ordering Scenarios.

TAG and EDI volume tests will be conducted in parallel, using a forecasted order split of 60% - 40% respectively. The PRE-4: TAG Pre Ordering Normal Volume Test will also be conducted in parallel. The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMGHP's performance measurement systems are prepared to track test transaction performance prior to beginning the Testtest. Test cycle performance data will also be collected through test management tools and delivered to the O&P Performance Results Comparison Test (O&P-7) and KPMG as inputs to their respective test execution functions.

3.2 Objective

The objective of the EDI/TAG Normal Volume Performance Test is to measure the performance of the EDI and TAG interface under normal projected YE01 transaction loads.

- Global Entrance Criteria must be satisfied.
- EDI and TAG documentation must be obtained.
- O&P-1: EDI Functional Test and O&P-2: TAG Functional Test must be successfully completed.
- Test transaction tracking strategy must be identified.
- Normal volume level must be defined.
- BellSouth's and <u>KPMGHP</u>'s performance measurement tracking systems must be prepared to track transactions.
- Certification testing for TTGs must be completed.
- Test scenarios must be selected (refer to <u>Appendix B-2 & Appendix B-3</u>).
- Test cases must be selected.
- BellSouth test_-bed customer account data must be loaded.
- Expected result files must be completed.
- Integrated test management tools must be installed and configured.
- Test scripts (transaction content) must be completed and loaded.
- Test case execution must be scheduled.
- Test cycle execution checklist must be created.
- Test logs must have been-created and results reporting template completed.
- Account and security access to EDI and TAG must be established.
- EDI and TAG connectivity must be established.
- Test execution team must be staffed, scheduled, and trained.
- Test Plan and evaluation criteria must be defined and approved.

The <u>test</u> scope will address the following sub-processes and functions to evaluate EDI and TAG performance under YE01 normal projected transaction loads.

Test Objective: Volume & Scalability, Performance, and Interface Test Technique: Transaction Processing		
Sub-Process	Function 5	
Submit Orders in Projected Normal Volumes	Create order transaction(s).	
	Send order in LSR format.	
	Receive acknowledgment.	
	Receive FOC or error/reject notification.	
	Send transaction response.	

Figure V-IV: EDI/TAG Normal Volume Performance Test Scope

3.5 Test Activities

- 1. Submit EDI/TAG test case transactions according to schedule.
- 2. Log transaction identifier(s) and submission date/time stamp.
- 3. Receive transaction responses.
- 4. Log transaction identifier(s) and receipt date/time stamp.
- 5. Format transaction response for comparator evaluation.
- 6. Match transaction response to submitted transaction.
- <u>57</u>. Verify that transaction response contains expected results.
- 6. Analyze timeliness performance
- 78. Flag any exceptions or mismatched responses and determine next steps in exception process. (If none, go to step 17.)
 - 9. Review exceptions to identify root cause(s).

- 10. Report any Severity 1, 2, and 3 test exceptions.
- 11. Troubleshoot exceptions and determine resolution procedures:
- 12. Resolve exceptions in accordance with exception resolution process.
- 13. Determine if test cycle should continue. (If not, go to step 18.)
- 14. Take corrective actions.
- 15. Increment transaction version numbers and resubmit transaction.
- 16. Log resubmission transaction identifier(s) and date/time stamp. (Go to step 3.)
- 17. Review comparator results and identify pending/open transaction.
- 48. Generate test results reports.
- 19. Calculate and report-performance metrics.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are -complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- Disaggregated performance metrics report must be completed.
- Expected versus actual results report must be completed.
- Exceptions report must be completed.
- Exceptions report due to documentation must be delivered to Document Review Test.
- Post-mortem analysis must be conducted.
- Test cycle results summary report must be created.
- Results summary and formatted data must be delivered to KPMC.
- Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.

4.1 Description

The EDI/TAG Peak Volume Performance Test will evaluate the behavior and performance of both the EDI and TAG interfaces under "peak" YE01 projected transaction load conditions simultaneously. This test cycle will execute selected flow-through pre-ordering (TAG only) and resale and UNE service request test cases, including error conditions. The PRE-5: TAG Pre Ordering Peak Volume Test will be conducted in parallel with this test.

The peak volume forecast will be developed using the peak hourly load identified for the EDI/TAG Normal Volume Performance Test, replicating those transaction volumes across an eight-hour period. Alternatively, if BellSouth's normal daily usage patterns are relatively flat, a multiple may be applied to the peak hourly load and the result replicated across an eight-hour day. The methodology and calculations are discussed further in Appendix C: Volume Analysis.

The peak volume test will be executed during two eight-hour periods. LSR loads will again be distributed geographically across multiple Georgia COs to more accurately reflect a realistic peak load operating environment. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/TAG Peak Volume Performance Test are described in Appendix B-2: Resale Ordering Scenarios and Appendix B-3: UNE Ordering Scenarios.

The Test Cycle Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMGHP's performance measurement systems are prepared to track test transaction performance prior to beginning the Testtest. Test cycle performance data will also be collected through test management tools and delivered to the O&P Performance Results Comparison Test (O&P-7) and KPMG as inputs to their respective test execution functions.

4.2 Objective

The objective of the EDI/TAG Peak Volume Performance Test is to measure the performance of the EDI and TAG interfaces under peak projected YE01 transaction loads.

- Global Entrance Criteria must be satisfied.
- EDI and TAG documentation must be obtained.

- O&P3 EDI/TAG Normal Volume Performance Test must be completed.
- Test transaction tracking strategy must be identified.
- Peak volume level must be defined.
- BellSouth's and <u>KPMGHP</u>'s performance measurement tracking systems must be prepared to track transactions.
- Test scenarios must be selected (refer to <u>Appendix B-2 & Appendix B-3</u>).
- Test cases must be selected.
- BellSouth test_-bed customer account data must be-loaded.
- Expected results files must be completed.
- Integrated test management tools must be installed and configured.
- Test scripts (transaction content) must be completed and loaded.
- Test case execution must be scheduled.
- Test cycle execution checklist must be created.
- Test logs must have been created and results reporting template completed.
- Account and security access to EDI and TAG must be established.
- EDI and TAG connectivity must be established.
- Test execution team must be staffed, scheduled, and trained.
- Test Plan and evaluation criteria must be defined and approved.

The <u>test</u> scope will address the following sub-processes and functions to evaluate EDI/TAG peak performance.

Test Objective: Volume & Scalability, Performance, and Interface Test Technique: Transaction Processing

Sub-Process	Function
Submit Orders in Projected Peak Volumes	Create order transaction(s).
	Send order in LSR format.
	Receive acknowledgment.
	Receive FOC or error/rejection notification.
	Send transaction response.

Figure V-V: EDI/TAG Peak Volume Performance Test Scope

4.5 Test Activities

- 1. Submit EDI/TAG test case transactions according to schedule.
- 2. Log transaction identifier(s) and submission date/time stamp.
- 3. Receive transaction responses.
- 4. Log transaction identifier(s) and receipt date/time stamp.
- 5. Format transaction response for comparator evaluation.
- 6. Match transaction response to submitted transaction.
- 7. <u>Analyze timeliness performance. Verify that transaction response contains expected results.</u>
- 85. Flag any exceptions or mismatched responses and determine next steps in exception process. (If none, go to Step 17.)
- 9. Review exceptions to identify root cause(s).
- 10. Report any Severity 1, 2, and 3 test exceptions.
- 11. Troubleshoot exceptions and determine resolution procedures.
- 12. Resolve exceptions in accordance with exceptions resolution process.
- 13. Determine if test cycle should continue. (If not, go to Step 18.)
- 14. Take corrective actions.

- 15. Increment transaction version numbers and resubmit transaction.
- 16. Log resubmission transaction identifier(s) and date/time stamp. (Go to Step 3.)
- 17. Review comparator results and identify pending/open transactions.
- Determine next steps in exceptions resolution process.
- 496 Generate test results reports.
- 20. Calculate and report performance metrics.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- —Disaggregated performance metrics report must be completed.
- Expected versus actual results report must be completed.
- Exceptions report must be completed.
- Exceptions report due to documentation must be delivered to Document Review Test.
- Post mortem analysis for test cycle must be conducted.
- Test cycle results summary report must be created.
- Results summary and formatted data must be delivered to KPMC.
- Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.

5.1 Description

The Provisioning Verification Test will evaluate BellSouth's ability to accurately and expeditiously complete the provisioning of service requests placed in both the O&P-1: EDI Functional Test and O&P-2: TAG Functional Test. This analysis will focus on electronically ordered UNEs and involves the physical inspection of BellSouth's provisioning process. Real CLEC provisioning activities will be observed to test end-to-end provisioning process on UNE – Loop orders. In addition,—In order_to test the full functionality of BellSouth's provisioning process, orders will be supplemented and canceled, require outside dispatch, and address customer coordination.

The test scenarios to be used in the Provisioning Verification Test are described in **Appendix B-3: UNE Ordering Scenarios**.

Test cycle performance data will be collected by an on-site observer and those results will be delivered to the O&P Performance Results Comparison Test (O&P-7) and KPMG as inputs to their respective test execution functions.

5.2 Objective

The objective of the Provisioning Evaluation Test is to evaluate BellSouth's performance in the provisioning of UNEs as described in the Georgia Order.

- Global Entrance Criteria must be satisfied.
- O&P-1, EDI Functional Test and O&P-2, TAG Functional Test must have been successfully executed.
- LEO Implementation Guides (Volumes 1-4), Local Number Portability Ordering Guide, TAG API Programmers Guide, and Georgia SGAT must have been obtained.
- Test transaction tracking strategy must be identified.
- BellSouth performance measurement tracking system must be prepared to track transactions.
- Three carrier OCNs must be obtained for provisioning.
- Test scenarios must be selected. (Refer to Appendix B-3).
- Test transaction tracking data elements must be-identified.

- Expected result files must be completed.
- BellSouth test bed must be prepared and customer account data loaded.
- BellSouth test facilities must be available.
- Test management tools must be installed and fully configured.
- Test scripts (transaction content) must be-completed and loaded.
- Test case execution must be scheduled.
- Detailed test cycle execution checklist must have been created.
- Test logs must have been created and results reporting templates completed.
- Test execution team must be identified, trained, and scheduled.
- Test Plan and evaluation criteria must be defined and approved.

The <u>test</u> scope will address the following sub-processes and functions to evaluate UNE provisioning.

Test Objective: Functionality and Performance Test Technique: Transaction Processing, Inspection	
Sub-Process	Function
BellSouth Provisioned Service	Receive design documents.
	Establish provisioning date and time.
	Perform provisioning activities.
	Perform testing activities.
	Turn up service.

Figure V-VI: -Provisioning -Verification Test Scope

5.5 Test Activities

- 1. Analyze FOC for provisioning information.
- 2. Log all provisioning notifications.
- 3. Verify provisioning appointment date/time.
- 4. Meet BellSouth provisioners for appointment.
- Log interactions in provisioning checklist.
- 6. Perform testing on provisioned services.
- 7. Log activity completion date/time for provisioning event.
- 8. Record results in appropriate provisioning log.
- Flag any exceptions or mismatched responses and determine next steps in exception process.
- 10. Review any exceptions to identify source.
- 11. Report any Severity 1, 2, and 3 test exceptions.
- 102 Generate test results reports.
- 113 Calculate and report performance metrics.

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.
- Disaggregated performance metrics report must be completed.
- Expected versus actual results report must be completed.
- Exceptions count report must be completed.

- Post-mortem analysis for test cycle must be conducted.
- Test cycle summary report must be created.
- Results summary and formatted data must be delivered to KPMC.

6.0 O&P-6: Order Processing Systems Scalability Capacity Management Evaluation

6.1 Description

The order processing systems capacity management evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of order processing interfaces.

The Order Processing Systems Scalability Evaluation is a review of the technical architecture and direct maintenance and support processes for the cluster of ordering applications. The technical review will focus on the modularity of the technology architecture, data architecture, and application architecture to assess scalability. The operational review will focus on the work capacity of existing support resources and the number of resources required to maintain the future technology architecture.

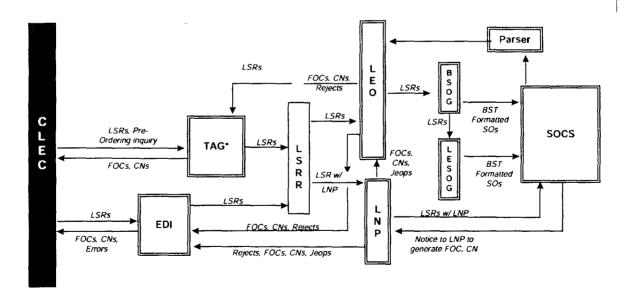


Figure VI-VII: BellSouth's Ordering Network Elements

6.2 Objective

The objective of the Order Processing Systems Scalability Capacity Management Evaluation is to determine analyze the capabilities of BST capacity management functions in relation to the order processing applications and associated workforce, and determine whether the procedures are adequate to identify and implement capacity increments to satisfy projected customer business volumes on a timely basis.

degree to which these applications and associated maintenance and support workforce can scale to accommodate projected YE01 transaction volumes and CLEC users.

6.3 Entrance Criteria

- Global Entrance Criteria satisfied.
- Availability of documentation identified as input.
- Interview guide / questionnaire developed.
- Interviewees identified and scheduled.
- <u>Detailed evaluation checklists developed.</u>
- EDI/TAG technical documentation must be identified and obtained.
- Performance metrics defined and approved.
- —Scalability evaluation matrix must be completed.
- Interview guide/questionnaire must be completed.
- Technical resources must be identified and scheduled for interviews.
- Test Plan and <u>e</u>Evaluation criteria <u>must be</u> defined and approved.
- LEO documentation must be obtained.

6.4 Test Scope

The <u>test</u> scope will address the following sub-processes and functions to evaluate EDI/TAG <u>capacity managements</u>calability.

Test Objective: Volume & Scalability Capacity Management Test Technique: Inspection and Interview		
Sub-Process	Function	
EDI/TAG <u>Capacity</u> <u>Management</u> Scalability	Technical architecture modularityEvaluate business volume tracking and forecasting	
	Evaluate resource usage tracking and foreca	asting
	Evaluate performance management process	ses_
	Operations support resources work capacity capacity management processes	<u> Evaluate</u>

Figure V-VIII: Order Processing Systems Scalability Capacity Management Evaluation
Test Scope

6.5 Test Activities

- 1. Identify all system documentation available for review. Review procedural and other documentation
- 2. Conduct structured review of technical documentation.
- 32. Conduct interviews with the key systems administration development and support personnel as appropriate.
- 43. Document findings.
- 54. Resolveport any Severity 1, 2, and 3 test exceptions.

- Global Exit Criteria satisfied.
- Documentation reviews complete.
- Interviews completed.
- Capacity management review report completed.
- Exit review completed.
- —Scalability evaluation matrix must be completed.
- Interviews must be completed and summarized.

- Summary findings documents must be completed.
- —Technical evaluations must be completed.
- Operational support evaluations must be completed.
- Results summary and reports must be delivered to KPMG.

7.0 O&P-7: O&P Performance Results Comparison

7.1 Description

The O&P Performance Results Comparison is a comparative analysis of O&P performance results collected by the <u>KPMG Test through</u> test management tools and by BellSouth's <u>OSS</u> performance measurement system. The source results collected from O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test, and O&P-4: EDI/TAG Peak Volume Performance Test will be compared to BellSouth's performance measurement systems results; variances accuracy and trends will be identified; and disparities will be analyzed for significance.

7.2 Objective

The objective of the O&P Performance Results Comparison is to assess the accuracy of BellSouth's wholesale performance metrics results using test transactions.

- Global Entrance Criteria satisfied.
- Results comparison strategy defined.
- EDI/TAG Functional Tests must be completed with disaggregated performance metrics reports (including raw data in electronic form).
- EDI/TAG Normal and Peak Volume Performance Tests must be completed with disaggregated performance metrics reports (including raw data in electronic form)!
- BellSouth performance measurement system reports compiled.
- Test execution scheduled.
- Test logs created and results reporting template completed.
- Test execution team staffed, scheduled, and trained.

- Target O&P performance metrics must be identified.
- The lowest level of BellSouth O&P performance measure tracking must be identified.
- Keys required for BellSouth to separate test transactions must be identified.
- Performance Metrics must be defined and approved.
- —Exceptions reporting process must be defined.
- **Exceptions reporting template must have been created.**
- Test Plan and evaluation criteria must be defined and approved.
- Guidelines for measuring variances must be defined.

The <u>test</u> scope will address the following sub-processes and functions to compare performance results.

Test Objective: Performance Test Technique: Performance Comparison		
Sub-Process	Function	
Percent Rejected Service Requests	Mechanized	
Reject Interval	Mechanized	
Firm Order Confirmation Timeliness	Mechanized	
Percentage of Subsequent Reports	UNE Designed	
	UNE Non-Designed	
Average Completion Interval	UNE Dispatch	
	UNE Non-Dispatch	
Order Completion Interval Distribution	UNE Dispatch	
	UNE Non-Dispatch	

Test Objective: Performance Test Technique: Performance Comparison		
Sub-Process	Function	
Held Order Interval Distribution and Mean Interval	UNE Dispatch	
	UNE Non-Dispatch	
Average Jeopardy Notice Interval	UNE Dispatch	
	UNE Non-Dispatch	
Percentage of Orders Given Jeopardy Notices	UNE Dispatch	
	UNE Non-Dispatch	
Percent Provisioning Troubles within 30 Days	UNE Dispatch	
	UNE Non-Dispatch	
Percent Service Order Accuracy	UNE Dispatch	
	UNE Non-Dispatch	
Average Completion Notice Interval	UNE Dispatch	
	UNE Non-Dispatch	

Figure V-IX: O&P Performance Results Comparison Test Scope

7.5 Test Activities

- 1. Acquire and format BellSouth and test management tools performance data files.
- 2. Compare disaggregated BellSouth performance results with test management tools performance results.
- 3. Flag any exceptions in results comparison and determine next steps in exception- resolution process.
- 4. Log exceptions in exceptions reporting template.
- 5. Identify and quantify root cause(s) for variances in results.

- 6. Troubleshoot exceptions and determine resolution procedure.
- 7. Resolve exceptions in accordance with the exceptions resolution process.
- 8. Determine if test cycle should continue.
- 9. Take corrective action and continue the test cycle.
- 410 Generate comparative analysis results reports.
- 11. Report any Severity 1, 2, and 3 test exceptions.

7.6 Exit Criteria

- Global Exit Criteria satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- <u>Test report generated.</u>
- Exit review completed.
- Comparative analysis report must be completed.
- Measure variance findings must be documented.
- Test cycle results summary report must be created.
- Results summary and reports must be delivered to KPMG.

8.0 O&P-8: EDI Documentation Evaluation

8.1 Description

The EDI Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the EDI interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy, and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-1: EDI Functional Test an exceptions report due to based on issues pertaining to documentation which addresses whether system functionality matches that described in the business rules documentation.

8.2 Objective

The objective of the EDI Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the EDI ordering and provisioning functions available to them.

8.3 Entrance Criteria

- Global Entrance Criteria must be satisfied.
- EDI documentation <u>must be</u> obtained.
- Teams must be staffed, scheduled and trained
- Documentation evaluation checklist must be completed.
- Exception report due to documentation from O&P 1: EDI Functional Test must be obtained.
- Team must be identified, trained, and staffed.
- Test Plan and evaluation criteria must be defined and approved.
- Interview guide/questionnaire(s) must be completed.
- Incident report(s) arising from documentation issues from O&P-1:EDI Functional Test must be obtained.
- BST and CLEC documentation Order Specialist and User contact information must be provided.
- Process for logging exceptions must be defined and accepted.

8.4 Test Scope

The <u>test</u> scope will address the following sub-processes and functions to evaluate EDI documentation <u>along with additional relevant documentation identified for use in Ordering and Provisioning.</u>

Test Objective: Documentation Test Technique: Document Review and Interview	
Sub-Process	Function
O&P Documentation	LEO Implementation Guides (Volumes 1-4).
	PC-EDI Training Document.
	Carrier Notifications off the BellSouth website.
	Resale CLEC Activation Requirements.
	Local Number Portability Ordering Guide.

Figure V-X: EDI Documentation Evaluation Test Scope

8.5 Test Activities

- 1. Obtain relevant documentation needed to carry out business processes related to O&P.
- 2. Conduct documentation evaluation using documentation evaluation checklist.
- 3. Conduct interviews with BellSouth documentation specialists.
- 4. Conduct interviews with CLEC documentation users.
- 5. Log <u>incidents exceptions</u> noted during Build and Certification Ttesting.
- 6. Flag any exceptions and determine next steps in execution resolution process.
- <u>76.</u> Compile results.
- 7. Report any Severity 1, 2 and 23 test exceptions.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are -complete.
- Expected results versus actual test case results reported.

- Test report generated.
- Exit review completed.
- Documentation checklists must be completed.
- Interview-summaries must be completed.
- <u>Incident report(s)</u>Exceptions log must be completed.
- Summary evaluation report must be completed.
- Results summary and reports must be delivered to KPMC.

9.0 O&P-9: TAG Documentation Evaluation

9.1 Description

The TAG Documentation Evaluation is an analysis of the BellSouth-provided documentation used by CLECs to interface and interact with the TAG interface for ordering and provisioning activities. This evaluation is intended to review the availability, accuracy and completeness of BellSouth's ordering and provisioning documentation using a variety of operational analysis techniques. This test will receive as input from the O&P-2: TAG Functional Test an incident exceptions report due to issues pertaining to documentation which addresses whether system functionality matches that described in the business rules documentation.

9.2 Objective

The objective of TAG Documentation Evaluation is to assess whether the documentation provided by BellSouth adequately assists CLECs in understanding how to implement and use all of the TAG ordering and provisioning functions available to them.

- Global Entrance Criteria must be satisfied.
- TAG documentation must be obtained.
- Teams must be staffed, scheduled, and trained.
- Documentation evaluation checklist must be completed.

- Exceptions report due to documentation from O&P-2 TAG Functional Test must be obtained.
- Team must be identified, trained, and staffed.
- Test Plan and evaluation criteria must be defined and approved.
- Interview guide/questionnaire(s) must be completed for BST & CLEC.
- Exception report(s) arising from documentation issues from O&P-2 TAG Functional Test must be obtained.
- BST and CLEC documentation Order Specialist and User contact information must be provided.
- Process for logging exceptions must be defined and accepted.

The scope will address the following sub-processes and functions to evaluate TAG documentation along with additional relevant documentation identified for use in Ordering and Provisioning.

Test Objective: Documentation Test Technique: Document Review and Interview		
Sub-Process	Function	
O&P Documentation	LEO Implementation Guides (Volumes 1-4).	
	TAG API Programmers <u>Reference</u> Guide.	
	TAG Programmer's Job Aid.	
	TAG Training for CLEC Programmer.	
	Carrier Notifications off the BellSouth website.	
	Resale CLEC Activation Requirements.	
	Local Number Portability Ordering Guide.	

Figure V-XI: TAG Documentation Evaluation Test Scope

9.5 Test Activities

- 1. Obtain relevant documentation needed to carry out business processes related to O&P.
- 2. Conduct documentation evaluation using documentation evaluation checklist
- 3. Conduct interviews with BellSouth documentation specialists
- 4. Conduct interviews with CLEC documentation users
- 5. Log exceptions incidents noted during Build and Certification Ttesting.
- 6. Flag any exceptions and determine next steps in execution resolution process.
- $\underline{76}$. Compile results.
- 7. Report any Severity 1, 2, and 3 test exceptions.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are -complete.
- Expected results versus actual test case results reported.
- Test report generated.
- Exit review completed.
- Documentation checklists must be completed.
 - —Interview summaries must be completed.
 - Exceptions log <u>Incident report(s)</u> must be completed.
 - —Summary evaluation report must be complete.
 - Results summary and reports must be delivered to KPMG.

10.0 O&P-9: EDI/TAG Production Volume Performance Test

10.1 Description

The EDI/TAG Production Volume Performance Test will evaluate simultaneously the behavior and performance of both the interfaces under current capacities of the production system. This test cycle will be executed by TTGs in a manner consistent with the forecasted daily usage patterns and transaction mix (excluding error conditions) for each interface. The TTGs are capable of submitting large volumes of flow through preorders (TAG only), and resale and UNE service request cases. The test will be executed during an eight-hour period. All the transactions submitted are expected to flow through BellSouth's OSS electronically and return an error or an FOC. LSR transaction loads will be distributed geographically across multiple Georgia COs. BellSouth will ensure that customer test accounts are established and configured accordingly.

The test scenarios to be used in the EDI/TAG Production Volume Performance Test are described in Appendix B-2: Resale Ordering Scenarios and Appendix B-3: UNE Ordering Scenarios.

The Test -Manager will coordinate efforts with BellSouth to ensure that BellSouth's and KPMG's performance measurement system are prepared to track test transaction performance prior to beginning the test. Test cycle performance data will also be collected though test management tools and delivered to the O&P Performance Results Comparison Test (O&P-7).

10.2 Objective

The objective of the EDI/TAG Production Volume Performance Test is to measure the performance of the EDI and TAG interface under current production capacity at YE01 projected mix.

- Global Entrance Criteria satisfied.
- EDI and TAG documentation obtained.

- <u>O&P-1: EDI Functional Test, O&P-2: TAG Functional Test, O&P-3: EDI/TAG Normal Volume Performance Test and O&P TAG/EDI Peak Volume Performance Test successfully completed.</u>
- Test transaction tracking strategy- identified.
- Current volume level defined.
- BellSouth's and KPMGHP's performance measurement tracking systems prepared to track transactions.
- <u>Certification testing for TTGs completed.</u>
- Test scenarios selected (refer to Appendix B-2 & Appendix B-3).
- <u>Test cases selected.</u>
- BellSouth test -bed customer account data loaded.
- Expected result files completed.
- Integrated test management tools installed and configured.
- Test scripts (transaction content) completed and loaded.
- Test case execution scheduled.
- Test cycle execution checklist created.
- Test logs created and results reporting template completed.
- Account and security access to EDI and TAG established.
- EDI and TAG connectivity established.
- Test execution team staffed, scheduled, and trained.
- Test Plan and evaluation criteria defined and approved.

<u>The</u> test <u>scope</u> will address the following <u>sub-processes</u> and functions to evaluate <u>EDI</u> and <u>TAG</u> performance under current transaction loads.

Test Objective: Volume & Scalability, Performance, and Interface Test Technique: Transaction Processing		
Sub-Process	<u>Function</u>	
Submit Orders in Projected Normal Volumes	Create order transaction(s).	
	Send order in LSR format.	
	Receive acknowledgment.	
	Receive FOC or error/reject notification.	
	Send transaction response.	

Figure V-IV: EDI/TAG Production Volume Performance Test Scope

10.5 Test Activities

- 1. Submit EDI/TAG test case transactions according to schedule.
- 2. <u>Log transaction identifier(s) and submission date/time stamp.</u>
- 3. Receive transaction responses.
- <u>4. Log transaction identifier(s) and critical performance responsiveness date/time stamp information.</u>
- 5. Verify that transaction response contains expected results.
- <u>6.</u> Flag any exceptions or mismatched responses and determine next steps in exception resolution process.
- 7. Generate test results reports.

- Global Exit Criteria must be satisfied.
- Exception resolution activities and reports are complete.
- Expected results versus actual test case results reported.
- <u>Test report generated.</u>

- Exit review completed.
- —Disaggregated performance metrics report must be completed.
- Expected versus actual results report must be completed.
- **Exceptions report must be completed.**
- Exceptions report due to documentation must be delivered to Document Review Test.
- Test cycle results summary report must be created.

Disaggregated performance metrics report and raw electronic data must be delivered to O&P Performance Results Comparison Test.